

REMARKS

Claims 1-3, 5-8, 10 and 25-34 are pending. Claims 28, 29, 33 and 34 have been canceled. Claim 1 has been amended to require that the oligonucleotide promotes retention of the construct by a cell; that oligonucleotide is C-myb, N-myc, C-myc or PSA gene specific antisense oligonucleotide or oligonucleotide analog; and that the targeting moiety, oligonucleotide and imaging agent are covalently linked. Support for the amendments can be found throughout the instant application, such as on page 18, lines 8-11; originally filed claims 29 and 34; and on page 25, lines 20-23. No new matter has been added.

Importantly, the claim amendments should not be construed to be acquiescence to any of the claim rejections. The Applicants expressly reserve the right to further prosecute the same or similar claims in subsequent patent applications claiming the benefit of priority to the instant application. 35 USC § 120; and 35 USC § 121. Favorable reconsideration is respectfully requested in view of the following remarks.

RESPONSE TO REJECTIONS UNDER 35 USC §§ 102(b) AND 103(a)

Rejections Based on Kuijpers et al.

Claims 1, 5, 8, 10, 25-28, 30-32 and 34 are rejected as anticipated by or, in the alternative, obvious over Kuijpers *et al.* (EP 0 490 434). Kuijpers discloses phosphorothioate antisense oligonucleotides conjugated with a radioisotope (“RAN”) which can bind to antibody oligonucleotide conjugates (“Antibody-DNA Conjugate”) and subsequently enter a cell as a therapeutic agent. The Examiner asserts that the RAN/Antibody-DNA Conjugate is a construct which contains an antibody, an oligonucleotide and an imaging agent suitable for use in PET, SPECT or MRI, and thus meets all of the limitations of the rejected claims. The Applicants respectfully traverse.

Solely to expedite prosecution, claim 1 has been amended to require that the oligonucleotide promote retention of the construct by a cell; that oligonucleotide is a C-myb, N-myc, C-myc or PSA gene specific antisense oligonucleotide or oligonucleotide analog; and that the targeting moiety, oligonucleotide and imaging agent are covalently linked. The Applicants respectfully assert that the complexes disclosed in Kuijpers do not meet the limitations of the

amendment claims. Specifically, the oligonucleotides in Kuijpers' do not promote retention of the construct by a cell nor are they C-myb, N-myc, C-myc or PSA gene specific antisense oligonucleotides or oligonucleotide analogs. In addition, the association mediated by the oligonucleotides is a non-covalent association, and thus the Kuijpers' complexes do not meet the limitation that the targeting moiety, oligonucleotide and imaging agent are covalently linked. Because Kuijpers does not teach all of the limitations of pending claims 1, 5, 8, 10, 25-27 and 30-32, the Applicants respectfully request the withdrawal of the rejection of said claims based on Kuijpers.

Rejections Based on Kayyem et al.

Claims 1-3 and 5-7 are rejected as anticipated by or, in the alternative, obvious over Kayyem *et al.* (US 6,232,295). Kayyem discloses contrast agents and gene delivery vehicles wherein the delivery vehicle comprises two polymeric compounds of differing charge with a contrast agent and targeting moiety attached to the polymeric compounds. The Applicants respectfully assert that the complexes disclosed in Kayyem do not meet the limitations of the amendment claims. Specifically, the oligonucleotides in Kayamm's complexes do not promote retention of the construct by a cell nor are they C-myb, N-myc, C-myc or PSA gene specific antisense oligonucleotides or oligonucleotide analogs.. Because Kayyem does not teach all of the limitations of pending claims 1-3 and 5-7, the Applicants respectfully request the withdrawal of the rejection of said claims based on Kayyem.

RESPONSE TO REJECTIONS UNDER 35 USC § 103(a)

Rejections Based on Kuijpers in view of Gerwitz et al. and Low et al.

Claims 1, 5, 8, 10 and 25-34 are rejected as unpatentable over Kuijpers *et al.* (EP 0 490 434) in view of Gerwitz *et al.* (U.S. 5,098,890) and Low *et al.* (U.S. 5,994,320). The Applicants respectfully traverse.

As noted above, the oligonucleotides in Kayamm's complexes do not promote retention of the construct by a cell nor are they C-myb, N-myc, C-myc or PSA gene specific antisense oligonucleotides or oligonucleotide analogs. The Examiner advances Gerwitz and Low in an attempt to cure the deficiencies of Kayamm with respect to antisense specific for C-myb, N-myc,

C-myc and PSA genes. However, neither Gerwitz nor Low teach or suggest the unexpected result that retention of antisense oligonucleotides is higher than retention of the corresponding sense oligonucleotides, and that the presence of RNA in a cell increases retention of a corresponding antisense molecule (see Example 6 in the instant application). Accordingly, because the claimed invention yields unexpectedly improved properties with respect to retention of antisense oligonucleotides, the Applicants respectfully request reconsideration and withdrawal of the rejection for obviousness of claims 1, 5, 8, 10, 25-27 and 30-32.

FEES

The Applicants believe that they have provided for all required fees in connection with the filing of this paper. Nevertheless, the Director is hereby authorized to charge any additional required fee to our Deposit Account: **06-1448**, Reference: **FLA-003.01**.

CONCLUSION

In view of the above remarks, it is believed that the pending claims are in condition for allowance. The Applicants respectfully request reconsideration and withdrawal of the pending rejections. The Applicants thank the Examiner for careful consideration of the present case. If a telephone conversation with the Applicants' Agent would expedite prosecution of the above-identified application, the Examiner is urged to contact the undersigned.

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Respectfully submitted,

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